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The Western Ground Snake, *Haldea valeriae elegans*, in Indiana

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The first report of the ground snake, *Haldea valeriae elegans* (Kennicott), from Indiana was published by Hay (1892, p. 448) who described a specimen from Brown County. Blanchard (1923) quoted the Hay record and suggested that verification was needed. Swanson (1939, p. 686) substantiated this record, listing two additional specimens from Brown County. Minton, (1944, p. 469) also cited Brown County and added Lawrence County to the list of Indiana stations for the species. Three additional specimens with definite locality data, and a fourth with a presumptive locality, have recently come to light and extend the range of the species farther north into the state.

One specimen was taken D.O.R. by the junior author on a little-used dirt road near the center of a seven acre abandoned field at Pine Hills, near Waveland, Montgomery County, Indiana on June 8, 1950, now RAE 1328. At present the dominant plants of the field are staghorn sumac (*Rhus typhina*) and a blackberry (*Rebus* sp.) ; conspicuous secondary plants are the bluegrasses (*Poa* sp.) oxeye daisy (*Chrysanthemum leucanthemum*), whitetop (*Erigeron annuus*), and goldenrods (*Solidago* sp.). The Pine Hills area is one of the few relict areas of hemlock in Indiana, and the southern limit of native white pine in the state; it has been described in detail by E. R. Smith (1933).

In a recent letter Dr. Sherman Minton, Jr. described a specimen from Turkey Run State Park, Parke County, Indiana. It was found D.O.R. on Route 47, August 28, 1950, by Richard Myers, now UMMZ 101842.

According to Dr. Minton a second Turkey Run specimen is in the collection of Dr. Clarence Shockley of Indiana University. Another specimen

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is in the Turkey Run State Park collection, and, although it lacks locality data, it was probably collected locally.

These records are not particularly remarkable in view of the recent work of P. W. Smith (1947) who lists specimens from Clark, Effingham, and Jasper Counties in Illinois, some 50 miles southwest of these Indiana localities. P. W. Smith, however, includes *Haldea* among species ". .

occurring farther north in other parts of their range, but apparently limited to south of the moraine [Shelbyville] in east-central Illinois." The southern limit of Wisconsin glaciation in this part of Indiana is about 15 miles south of Pine Hills and 10 miles south of Turkey Run, making these records the first for the subspecies from the area of Wisconsin drift. Although the two subspecies of *Haldea valeriae* extend slightly north of the glacial border in Indiana and Ohio (Conant, 1938, map 22, p. 95, for *valeriae valeriae*), the range of the species correlates quite closely with the glacial boundary, and may be added to the list of forms which Thomas (1951) considers as indicating that animal communities survived the Pleistocene close to the glacial border. Range extensions into the area of drift may be explained on the basis of purely local factors.

Scalation on two of the specimens was as follows:

	RAE 1328	UMMZ 101842
sex	female	male
scale rows	17	17
ventrals	123	118
caudals	29	36
supralabials	6/6?*	6/6
infralabials	6/6	6/7
temporals	1+2	1+1
body length	141 mm.	186 mm.
tail length	26 mm.	43 mm.
tail length/total length	0.156	0.187

Colorations on these two were as follows: RAE 1328, dorsal coloration in alcohol a slate gray with a tan median stripe which is delimited more sharply by scattered black patches on scale rows 7 and 8, and 10 and 11; venter a uniform white. UMMZ 101842, "Dorsum in fresh specimen light brown with faint pale median stripe. Belly pale greenish-yellow. Head greyish-brown; labials dirty white." (Minton) .

We are indebted to Dr. Sherman Minton, Jr., for the data included on UMMZ 101842, and the information relative to the other two Turkey Run specimens; and to Dr. Orlando Park and Dr. Eliot C. Williams, Jr. who made the trip possible on which RAE 1328 was collected.

* Right side of head injured.

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